CUMULATIVE INDEXES

VOLUMES 14-18

INDEX OF CONTRIBUTING AUTHORS

A

Agar, J. N., 15:469
Ausloos, P., 17:205

B

Barker, J. A., 14:229
Bauer, S. H., 16:245
Benson, S. W., 16:397
Bentrude, W. G., 18:283
Biemann, K., 16:481
Bommer, P., 16:481
Bothner-By, A. A., 16:43
Brown, I., 16:147
Buckingham, A. D., 17:399
Bunnett, J. F., 14:271
Burwell, R. L., Jr., 15:131

C

Caldwell, D. J., 15:281
Claesson, S., 18:1
Cobble, J. W., 17:15
Conway, B. E., 17:481
Curtiss, C. F., 18:125

D

Datz, S., 14:61
Daunt, J. G., 15:83
De Maeyer, L., 14:5
DeMore, W. B., 16:397
Dewar, M. J. S., 16:321
Dorfman, L. M., 18:177
Dwek, R. A., 18:99
Dyne, P. J., 14:313

E

Edwards, D. O., 15:83
Ehrlich, G., 17:295
Eyring, H., 15:281

F

Firestone, R. F., 18:177
Fite, W. L., 14:61
Fitts, D. D., 17:59
Flygare, W. H., 18:325
Franklin, J. L., 18:261

G

Gäumann, T., 16:125
Geballe, T. H., 14:141
Gill, E. K., 14:205
Gimarc, B. M., 16:451
Golebiewski, A., 18:353
Gossner, K., 14:177
Grant, D. M., 15:489

H

Halpern, J., 16:103
Hamann, S. D., 15:349
Hammes, G. G., 15:13
Helfand, E., 14:117
Henderson, D., 15:31
Herber, R. H., 17:261
Hildebrand, J. H., 14:1
Hochstrasser, R. M., 17:457
Holcomb, D. N., 15:371
Hughes, R. E., 14:291

I

Ibers, J. A., 16:375

J

Jhon, M. S., 17:373
Jones, M. T., 17:323
Jost, W., 17:1

K

Kivelson, D., 15:197
Kleppa, O. J., 16:187
Knobler, C. M., 14:251
Kudchadker, A. P., 16:213
Kustin, K., 14:5

L

Levich, V. G., 18:153
Libby, W., 15:1
Lide, D. R., Jr., 15:225

M

McConnell, H. M., 17:237
Mahan, B. H., 17:173
Maki, A. H., 18:9
Mandelkern, L., 15:421
Maradudin, A. A., 14:89
Marchand, A. P., 16:321
Marcus, R. A., 15:155
Matthias, B. T., 14:141
Melboom, S., 14:335
Morrison, J. A., 14:205
Müller, E. W., 18:35

N

Nielsen, A. H., 14:359
Nordio, P. L., 17:237

O

Oppenheim, I., 15:395

P

Parr, R. G., 16:451
Pauling, L., 16:1
Peri, J. B., 15:131
Peticolas, W. L., 18:233
Phillips, W. D., 17:323
Platt, J. R., 16:503
Pople, J. A., 16:43
Prosser, F., 17:37
Purnell, J. H., 18:81

R

Richards, R. E., 18:99
Robinson, G. W., 15:311

S

Scatchard, G., 14:161
Schnepp, O., 14:35
Schwab, G.-M., 14:177
Schwarz, H. A., 16:347
Shull, H., 17:37
Sim, G. A., 18:57
Sinanoglu, O., 15:251
Skinner, H. A., 15:449
Smith, D. R., 14:313
Smyth, C. P., 17:433
Somayajulu, G. R., 16:213
Soos, Z. G., 17:237
Spikes, J., 18:409
Stephens, P. J., 17:399
Stone, J. A., 14:313
Stoughton, R. W., 16:297
Straight, R., 18:409
Strehlow, H., 16:167

CUMULATIVE INDEXES

VOLUMES 14-18

INDEX OF CONTRIBUTING AUTHORS

A

Agar, J. N., 15:469
Ausloos, P., 17:205

B

Barker, J. A., 14:229
Bauer, S. H., 16:245
Benson, S. W., 16:397
Bentrude, W. G., 18:283
Biemann, K., 16:481
Bommer, P., 16:481
Bothner-By, A. A., 16:43
Brown, I., 16:147
Buckingham, A. D., 17:399
Bunnett, J. F., 14:271
Burwell, R. L., Jr., 15:131

C

Caldwell, D. J., 15:281
Claesson, S., 18:1
Cobble, J. W., 17:15
Conway, B. E., 17:481
Curtiss, C. F., 18:125

D

Datz, S., 14:61
Daunt, J. G., 15:83
De Maeyer, L., 14:5
DeMore, W. B., 16:397
Dewar, M. J. S., 16:321
Dorfman, L. M., 18:177
Dwek, R. A., 18:99
Dyne, P. J., 14:313

E

Edwards, D. O., 15:83
Ehrlich, G., 17:295
Eyring, H., 15:281

F

Firestone, R. F., 18:177
Fite, W. L., 14:61
Fitts, D. D., 17:59
Flygare, W. H., 18:325
Franklin, J. L., 18:261

G

Gäumann, T., 16:125
Geballe, T. H., 14:141
Gill, E. K., 14:205
Gimarc, B. M., 16:451
Golebiewski, A., 18:353
Gossner, K., 14:177
Grant, D. M., 15:489

H

Halpern, J., 16:103
Hamann, S. D., 15:349
Hammes, G. G., 15:13
Helfand, E., 14:117
Henderson, D., 15:31
Herber, R. H., 17:261
Hildebrand, J. H., 14:1
Hochstrasser, R. M., 17:457
Holcomb, D. N., 15:371
Hughes, R. E., 14:291

I

Ibers, J. A., 16:375

J

Jhon, M. S., 17:373
Jones, M. T., 17:323
Jost, W., 17:1

K

Kivelson, D., 15:197
Kleppa, O. J., 16:187
Knobler, C. M., 14:251
Kudchadker, A. P., 16:213
Kustin, K., 14:5

L

Levich, V. G., 18:153
Libby, W., 15:1
Lide, D. R., Jr., 15:225

M

McConnell, H. M., 17:237
Mahan, B. H., 17:173
Maki, A. H., 18:9
Mandelkern, L., 15:421
Maradudin, A. A., 14:89
Marchand, A. P., 16:321
Marcus, R. A., 15:155
Matthias, B. T., 14:141
Melboom, S., 14:335
Morrison, J. A., 14:205
Müller, E. W., 18:35

N

Nielsen, A. H., 14:359
Nordio, P. L., 17:237

O

Oppenheim, I., 15:395

P

Parr, R. G., 16:451
Pauling, L., 16:1
Peri, J. B., 15:131
Peticolas, W. L., 18:233
Phillips, W. D., 17:323
Platt, J. R., 16:503
Pople, J. A., 16:43
Prosser, F., 17:37
Purnell, J. H., 18:81

R

Richards, R. E., 18:99
Robinson, G. W., 15:311

S

Scatchard, G., 14:161
Schnepp, O., 14:35
Schwab, G.-M., 14:177
Schwarz, H. A., 16:347
Shull, H., 17:37
Sim, G. A., 18:57
Sinanoglu, O., 15:251
Skinner, H. A., 15:449
Smith, D. R., 14:313
Smyth, C. P., 17:433
Somayajulu, G. R., 16:213
Soos, Z. G., 17:237
Spikes, J., 18:409
Stephens, P. J., 17:399
Stone, J. A., 14:313
Stoughton, R. W., 16:297
Straight, R., 18:409
Strehlow, H., 16:167

Sutin, N., 17:119

T

Taylor, H. S., 18:353
Thomson, C., 15:197
Thorn, R. J., 17:83
Thornton, E. R., 17:349
Tinoco, I., Jr., 15:371
Tiselius, A., 18:1
Tuan, D. F.-T., 15:251

V

von Frankenberg, C. A., 14:291

W

Wallace, W. E., 15:109
Westrum, E. F., Jr., 18: 135
Whalley, E., 18:205
White, D., 14:251
Williamson, A. G., 15: 63
Wolfgang, R., 16:15

Z

Zandler, M. E., 17:373
Zwanzig, R., 16:67
Zwolinski, B. J., 16: 213

INDEX OF CHAPTER TITLES

VOLUMES 14-18

CATALYSIS		
Heterogeneous Catalysis	G.-M. Schwab, K. Gossner	14:177-204
Catalysis by Coordination Compounds	J. Halpern	16:103-24
CHEMICAL ASPECTS OF GENETICS		
Chemical Aspects of Genetics	J. R. Platt	16:503-24
CHROMATOGRAPHY		
Gas Chromatography	T. Gäumann	16:125-46
Gas Chromatography	J. H. Purnell	18:81-98
COMBUSTION		
Mechanisms and Kinetics of Hydrocarbon Combustion	J. L. Franklin	18:261-82
CRYOGENICS		
Cryogenics, Helium Three	J. G. Daunt, D. O. Edwards	15:83-108
DIELECTRIC POLARIZATION		
Dielectric Polarization and Relaxation	C. P. Smyth	17:433-56
ELECTRODES		
Chemical and Electrochemical Electron Transfer Theory	R. A. Marcus	15:155-96
ELECTROLYTES		
Solutions of Electrolytes	G. Scatchard	14:161-76
Solutions of Electrolytes	J. N. Agar	15:469-88
Solutions of Electrolytes	R. W. Stoughton	16:297-320
Electrolyte Solutions: Solvation and Structural Aspects	B. E. Conway	17:481-528
ELECTRON SPIN RESONANCE		
Electron Spin Resonance	D. Kivelson, C. Thomson	15:197-224
Electron Spin Resonance	M. T. Jones, W. D. Phillips	17:323-48
Electron Spin Resonance	A. H. Maki	18:9-34
FIELD EMISSION		
Field Emission	E. W. Müller	18:35-56
FUSED SALTS		
Solution Chemistry of Simple Fused Salts	O. J. Kleppa	16:187-212
HIGH TEMPERATURE CHEMISTRY		
Chemical Phenomena at High		

Temperature	R. J. Thorn	17:83-118
KINETICS		
Kinetics of Solids	E. K. Gill, J. A. Morrison	14:205-28
Theory of Macroscopic Kinetics of Heterogeneous and Homogeneous-Heterogeneous Processes	V. G. Levich	18:153-76
KINETICS - GASES		
Chemical Research with Molecular Beams	W. L. Fite, S. Datz	14:61-88
Gas Kinetics	S. W. Benson, W. B. DeMore	16:397-450
Gas Kinetics	B. H. Mahan	17:173-204
Transport Phenomena in Gases	C. F. Curtiss	18:125-34
KINETICS - HIGH ENERGY PARTICLES		
Hot Atom Chemistry	R. Wolfgang	16:15-42
KINETICS - SOLUTIONS		
Fast Reactions in Solution	L. De Maeyer, K. Kustin	14:5-34
Fast Reactions in Solution	G. G. Hammes	15:13-30
Fast Reactions in Solution	H. Strehlow	16:167-86
The Kinetics of Inorganic Reactions in Solution	N. Sutin	17:119-72
MAGNETISM		
Diamagnetic Anisotropy of Electron Groups	A. A. Bothner-By, J. A. Pople	16:43-66
MASS SPECTROMETRY		
Mass Spectrometry	P. Bommer, K. Biemann	16:481-502
NUCLEAR MAGNETIC RESONANCE		
Nuclear Magnetic Resonance	S. Meiboom	14:335-58
High Resolution Nuclear Magnetic Resonance	D. M. Grant	15:489-528
Nuclear Magnetic Resonance	R. A. Dwek, R. E. Richards	18:99-124
NUCLEIC ACIDS		
Nucleic Acids	I. Tinoco, Jr., D. N. Holcomb	15:371-94
OPTICAL ROTATORY POWER		
Optical Rotation	D. J. Caldwell, H. Eyring	15:281-310
Magnetic Optical Activity	A. D. Buckingham, P. J. Stephens	17:399-432
ORGANIC REACTIONS		
Nucleophilic Reactivity	J. F. Bunnett	14:271-90
Physical Organic Chemistry: II-Complexes as Intermediates in Organic Reactions	M. J. S. Dewar, A. P. Marchand	16:321-46
Physical Organic Chemistry	E. R. Thornton	17:349-72
Physical Organic Chemistry: Free Radicals	W. G. Bentrude	18:283-324
PHOTOBIOLOGY		
Sensitized Photochemical Processes in Biological Systems	J. Spikes, R. Straight	18:409-36
PHOTOSYNTHESIS		
Quantum Processes in Photosynthesis	G. W. Robinson	15:311-48
POLYMERS		
High Polymers	R. E. Hughes, C. A. von Frankenberg	14:291-312
Contractile Processes in Fibrous Macromolecules	L. Mandelkern	15:421-48
PREFATORY CHAPTER		
Fifty Years of Physical Chemistry in Berkeley	J. H. Hildebrand	14:1-4
Thirty Years of Atomic Chemistry	W. F. Libby	15:1-6
Berkeley Radiochemistry	W. F. Libby	15:7-12
Fifty Years of Physical Chemistry in the California Institute of Technology	L. Pauling	16:1-14
The First Forty-Five Years of Physical Chemistry in Germany	W. Jost	17:1-14
The Svedberg and Fifty Years of Physical		

Chemistry in Sweden	A. Tiselius, S. Claesson	18:1-8
PRESSURE		
High Pressure Chemistry	S. D. Hamann	15:349-70
High Pressure	E. Whalley	18:205-32
QUANTUM THEORY		
Quantum Theory of Atoms and Molecules	O. Sinanoglu, D. F.-T. Tuan	15:251-80
Quantum Theory of Valence	B. M. Gimarc, R. G. Parr	16:451-80
Quantum Chemistry	F. Prosser, H. Shull	17:37-58
Quantum Theory of Atoms and Molecules	A. Golebiewski, H. S. Taylor	18:353-408
RADIATION CHEMISTRY		
Radiation Chemistry	P. J. Dyne, D. R. Smith, J. A. Stone	14:313-34
Radiation Chemistry	H. A. Schwarz	16:347-74
Radiation and Photochemistry	P. Ausloos	17:205-36
Radiation Chemistry	L. M. Dorfman, R. F. Firestone	18:177-204
SHOCK WAVES		
Shock Waves	S. H. Bauer	16:245-96
SOLID STATE		
Lattice Dynamics	A. A. Maradudin	14:89-116
Superconductivity	T. H. Geballe, B. T. Matthias	14:141-60
Solid State: Intermetallic Compounds	W. E. Wallace	15:109-30
Spin Excitations in Ionic Molecular Crystals	P. L. Nordio, Z. G. Soos, H. M. McConnell	17:237-60
SOLUTIONS - NONELECTROLYTES		
Solutions of Nonelectrolytes	J. A. Barker	14:229-50
Solutions of Nonelectrolytes	A. G. Williamson	15:63-82
Solutions of Nonelectrolytes	I. Brown	16:147-66
Solutions of Nonelectrolytes	M. E. Zandler, M. S. Jhon	17:373-98
SPECTROSCOPY		
Electronic Spectra of Molecular Crystals	O. Schnepp	14:35-60
Microwave Spectroscopy	D. R. Lide, Jr.	15:225-50
Chemical Applications of Mössbauer Spectroscopy	R. H. Herber	17:261-94
Electronic Spectra of Organic Molecules	R. M. Hochstrasser	17:457-80
Microwave Spectroscopy and Molecular Structure	W. H. Flygare	18:325-52
SPECTROSCOPY - INFRARED		
Infrared Vibrational-Rotational Spectroscopy	A. H. Nielsen	14:359-86
Multiphoton Spectroscopy	W. L. Peticolas	18:233-60
STATISTICAL MECHANICS		
Statistical Mechanics	E. Helfand	14:117-40
Theory of Liquids and Dense Gases	D. Henderson	15:31-62
Statistical Mechanics—A Selected Review	I. Oppenheim	15:395-420
Time-Correlation Functions and Transport Coefficients in Statistical Mechanics	R. Zwanzig	16:67-102
Statistical Mechanics: A Study of Intermolecular Forces	D. D. Fitts	17:59-82
STRUCTURE - MOLECULES		
Molecular Structure	J. A. Ibers	16:375-96
Molecular Structure	G. A. Sim	18:57-80
SURFACE CHEMISTRY		
Surface Chemistry	R. L. Burwell, Jr., J. B. Peri	15:131-54
Atomic Processes at Solid Surfaces	G. Ehrlich	17:295-322
THERMOCHEMISTRY AND THERMODYNAMICS		
Thermodynamics of Solutions at Low		

Temperatures	D. White, C. M. Knobler	14:251-70
Thermochemistry and Bond Dissociation Energies	H. A. Skinner	15:449-68
Thermodynamics	G. R. Somayajulu, A. P. Kudchadker, B. J. Zwolinski	16:213-44
Thermodynamics	J. W. Cobble	17:15-36
Thermochemistry and Thermodynamics	E. F. Westrum, Jr.	18:135-52